

How to Write a Number in Scientific Notation

➡ For numbers greater than 1 (big numbers).
Move the decimal to the left until there is only one number before the decimal.

➡ Count the number of places the decimal moved, this will be the exponent

➡ Example: the mass of the earth is
5,980,000,000,000,000,000,000,000 kg

OR $5.98 \times 10^{24} \text{kg}$ x 2

EE
EXP big



1.196 E 25 12
1.20 $\times 10^{25}$ = 1.2×10^1

- If the number is less than one (small number), move the decimal to the right and count the places it moved. This will be the **negative** exponent.
- Example: The diameter of a proton is 0.000 000 000 000 001 m

15 places →

or
 $1 \times 10^{-15} \text{ m}$

Small

~~392×10^5~~

39200000

3.92×10^7

5.32×10^{-8}

0.0000000532



Write the scientific notation for the following:

The speed of sound is 332 m/s

The distance b/w the Earth and the Moon is 384 000 000 m

The radius of the sun is 696 000 000 m

